

Abstract

In Romania, maize is the main cultivated plan and maize crops are extremely important from an economic point of view. Research with the no-tillage system applied to maize crops were made in the Romanian Plain, Șarpe (1968, 1987, 2000, 2008, 2009), in Banat, Motiu (2004) and in the Flood Plain of the Danube River, Șarpe (2004, 2005, 2007, 2008). The results obtained in Romania confirm the results of the research made in other countries: Philips and Young (1973), Roller (1999), Derpsch (2001). "Ramira " is the first agricultural company from Giurgiu County which in 2009 cultivated maize in the no-tillage system on a 200 hectares area of land, the results obtained being quite remarkable. In the conventional system, under the weather conditions of the year 2009, the grain yield recorded from the maize crops amounted to 7,200 kg/ha, while in the no-tillage system a grain yield of 7,500 kg/ha was recorded - so the yields obtained in the technological systems were practically equal. However, there were small differences in terms of fuel consumption. For example, in the no-tillage system, a 78 litres/ha fuel consumption was recorded, while in the no-tillage system this amounted to only 25 litres/ha. Big differences were also recorded as regards the expenses in the conventional and no-tillage systems. In the conventional system, the expenses made for all the mechanical works performed from the sowing stage to the harvesting stage, these expenses amounted to RON 2,350.00 per hectare, while in the no-tillage system, they amounted to only RON 610,00 per hectare.

Keywords: Ramira, conventional, no-tillage, Gaspardo, Regina model